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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/943,786	08/31/2001	Michel Shane Simpson	NO078/100002	1045
24256	7590	01/13/2005	EXAMINER	
DINSMORE & SHOHL, LLP 1900 CHEMED CENTER 255 EAST FIFTH STREET CINCINNATI, OH 45202			LY, ANH	
			ART UNIT	PAPER NUMBER
			2162	

DATE MAILED: 01/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/943,786

Applicant(s)

SIMPSON ET AL. 

Examiner

Anh Ly

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is response to Applicants' Amendment filed on 07/07/2004.
2. Claims 1-20 are pending in this Application.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

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5. Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pub. No.: US 2001/0034733 A1 of Prompt et al. (hereinafter Prompt) in view of US Patent No. 6,501,491 issued to Brown et al. (hereinafter Brown).

With respect to claim 1, Prompt discloses one or more directories comprising a plurality of directory objects each having one or more object attributes and data (LDAP directory includes entries, each of which has information (attributes) pertaining to an object, which is an object to a directory is accomplished by instantiating the object: Page 2, sections 0013-0015);

a directory shell including directory references referencing said two or more directories, wherein the directory references identify which directories that the directory shell can access (LDAP directory is software server and LDAP address, which can be presented as a directory for use by other computers and allow LDAP directory to make reference to another directory when client request objects or attributes that are not stored in the primary directory: Page 10, section 0120 and Page3, section 0025 and Page 4, section 0026);

one or more categories in said directory shell, each of said categories being associated with directory objects for the two or more directories at least a portion of the associated object attributes (LDAP can be used to enable queries and updates to be made to a directory structure, also is a type of Internet directory service and is based on a domain- and attribute-oriented data model: Page 2, sections 0013-0017 and Page 3, section 0018-0019); and

a directory driver for each of said directories, wherein each of said directory drivers is operable to provide information to allow the directory interface to communicate with the directory (fig. 9, a graphical user interface for displaying directory view and Page 12, section 0138 and Page 15, section 0169).

Prompt teaches LDAP directory as a software server and where the classes of objects (or categories of objects) are stored and LDAP address is directory reference referencing to another directory and it can be used to search, query and update the objects. Prompt does not explicitly teach a query interface operable to query the categories in the directory shell and a directory interface operable to send a search request to the one or more directories in accordance with the query, and receive data from the one or more directories that satisfies the search request.

However, Brown teaches the query form that is recognizable by the directory service in order to query the objects or classes of objects storing in the directories to view via user interface (see figs. 6, 8A and 10, col. 8, lines 1-42 and col. 13, lines 20-30; col. 2, lines 20-25 and lines 65-67 and col. 3, lines 1-25).

Therefore, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Prompt with the teachings of Brown, where the user interface for the directory (Prompt's fig. 9) would incorporate the user of user interface to query, search, update the attributes and objects in the directory, in the same conventional manner as described by Brown (fig. 6 and col. 8, lines 1-42). The motivation being to provide a user interface for users to manage the directories via the user of LDAP directory or software server.

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With respect to claim 2, Prompt teaches wherein at least one of the directories are LDAP compliant (Page 2, section 0013-0014 and page 3, section 0024-0025).

With respect to claim 3, Prompt teaches wherein the directory driver comprises schema data for one or more of said directories (abstract, Page 2, section 0015 and Page 3, sections 0020-0021).

With respect to claim 4, Prompt teaches wherein said one or more directories are managed on a plurality of servers in communication with a computer onto which the directory shell is loaded (Page 16, section 0180).

With respect to claims 5-6, Prompt teaches a computer system as discussed in claim 1.

Prompt teaches LDAP directory as a software server and where the classes of objects (or categories of objects) are stored and LDAP address is directory reference referencing to another directory and it can be used to search, query and update the objects. Prompt does not explicitly teach HTML and query interface.

However, Brown teaches the query form that is recognizable by the directory service in order to query the objects or classes of objects storing in the directories to view via user interface (see figs. 6, 8A and 10, col. 8, lines 1-42 and col. 13, lines 20-30; col. 2, lines 20-25 and lines 65-67 and col. 3, lines 1-25), the HTML format page (col. 10, lines 1-18) and the administrator to view the classes of objects (col. 2, lines 17-54, col. 3, lines 10-15 and col. 4, lines 17-28).

Therefore, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Prompt with the teachings of Brown, where the user interface for the directory (Prompt's fig. 9) would incorporate the user of user interface to query, search, update the attributes and objects in the directory, in the same conventional manner as described by Brown (fig. 6 and col. 8, lines 1-42). The motivation being to provide a user interface for users to manage the directories via the user of LDAP directory or software server.

With respect to claim 7, Prompt teaches creating a directory shell comprising one or more categories wherein the directory shell comprises one or more directory references, each directory reference being associated with a directory and including data specific to the directory, wherein the directory reference identifies which directories the directory shell may access (LDAP directory is software server and LDAP address, which can be presented as a directory for use by other computers and allow LDAP directory to make reference to another directory when client request objects or attributes that are not stored in the primary directory: Page 10, section 0120 and Page3, section 0025 and Page 4, section 0026)

associating said directory shell with one or more directories, wherein each directory comprises a plurality of directory objects attributes having object attributes and attribute data (LDAP directory includes entries, each of which has information (attributes) pertaining to an object, which is an object to a directory is accomplished by instantiating the object: Page 2, sections 0013-0015);

associating each of said categories with one or more directory objects and at least a portion of the object attributes corresponding to the directory objects (LDAP can be used to enable queries and updates to be made to a directory structure, also is a type of Internet directory service and is based on a domain- and attribute-oriented data model: Page 2, sections 0013-0017 and Page 3, section 0018-0019).

Prompt teaches LDAP directory as a software server and where the classes of objects (or categories of objects) are stored and LDAP address is directory reference referencing to another directory and it can be used to search, query and update the objects. Prompt does not explicitly teach requesting a search for query data against a selected category; and searching the one or more directories for the query data against the attribute data corresponding to the directory objects and object attributes associated with the selected category.

However, Brown teaches the query form that is recognizable by the directory service in order to query the objects or classes of objects storing in the directories to view via user interface (see figs. 6, 8A and 10, col. 8, lines 1-42 and col. 13, lines 20-30).

Therefore, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Prompt with the teachings of Brown, where the user interface for the directory (Prompt's fig. 9) would incorporate the user of user interface to query, search, update the attributes and objects in the directory, in the same conventional manner as described by Brown (fig. 6 and col. 8,



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lines 1-42). The motivation being to provide a user interface for users to manage the directories via the user of LDAP directory or software server.

With respect to claim 8, Prompt teaches wherein associating categories includes mapping category attributes with object attributes (mapping the objects in the virtual directory and relational database objects: Page 3, section 0021 and section 0025).

With respect to claims 9-10, Prompt teaches a computer system as discussed in claim 7.

Prompt teaches LDAP directory as a software server and where the classes of objects (or categories of objects) are stored and LDAP address is directory reference referencing to another directory and it can be used to search, query and update the objects. Prompt does not explicitly teach wherein requesting a search includes formatting a Boolean search and wherein the creating, associating with directories, associating with directory objects, requesting, and searching are performed sequentially.

However, Brown teaches searching with the Boolean value and the search path (col. 10, lines 56-67 and col. 11, lines 1-32).

Therefore, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Prompt with the teachings of Brown, where the user interface for the directory (Prompt's fig. 9) would incorporate the user of user interface to query, search, update the attributes and objects in the directory, in the same conventional manner as described by Brown (fig. 6 and col. 8,

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lines 1-42). The motivation being to provide a user interface for users to manage the directories via the user of LDAP directory or software server.

Claim 11 is essentially the same as claim 7 except that it is directed to a computer readable medium rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.

Claim 12 is essentially the same as claim 7 except that it is directed to a propagated signal rather than a method, and is rejected for the same reason as applied to the claim 7 hereinabove.

With respect to claim 13, Prompt teaches one or more directories, each directory comprising a plurality of classes with attributes and a plurality of objects instantiated from said classes, wherein said objects comprise a plurality of data associated with the attributes; a directory shell associated with said one or more directories and including one or more directory references; a plurality of categories associated with said directory shell, wherein each category corresponds to classes that are associated with a plurality of directory; a plurality of category attributes associated with each category, wherein each category attribute corresponds to an attribute of the class corresponding to the associated category (LDAP directory includes entries, each of which has information (attributes) pertaining to an object, which is an object to a directory is accomplished by instantiating the object: Page 2, sections 0013-0015);

a directory shell including directory references referencing said two or more directories, wherein the directory references identify which directories that the directory shell can access (LDAP directory is software server and LDAP address, which can be

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presented as a directory for use by other computers and allow LDAP directory to make reference to another directory when client request objects or attributes that are not stored in the primary directory: Page 10, section 0120 and Page 3, section 0025 and Page 4, section 0026; LDAP can be used to enable queries and updates to be made to a directory structure, also is a type of Internet directory service and is based on a domain- and attribute-oriented data model: Page 2, sections 0013-0017 and Page 3, section 0018-0019; and a graphical user interface for displaying directory view and Page 12, section 0138 and Page 15, section 0169).

Prompt teaches LDAP directory as a software server and where the classes of objects (or categories of objects) are stored and LDAP address is directory reference referencing to another directory and it can be used to search, query and update the objects. Prompt does not explicitly teach wherein the directory shell is querable against the categories to search and retrieve data of the objects in the one or more directories.

However, Brown teaches the query form that is recognizable by the directory service in order to query the objects or classes of objects storing in the directories to view via user interface (see figs. 6, 8A and 10, col. 8, lines 1-42 and col. 13, lines 20-30).

Therefore, It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teachings of Prompt with the teachings of Brown, where the user interface for the directory (Prompt's fig. 9) would incorporate the user of user interface to query, search, update the attributes and objects in the directory, in the same conventional manner as described by Brown (fig. 6 and col. 8,

lines 1-42). The motivation being to provide a user interface for users to manage the directories via the user of LDAP directory or software server.

With respect to claims 14-20, Prompt teaches wherein at least one of the one or more directories is a distributed directory (LDAP directory is a distributed directory over the network: Page 3, section 0024-0025);

wherein at least one of the one or more directories is LDAP compliant (LDAP directory: section 0024-0025); wherein at least one of the one or more directories is a hierarchical directory (abstract, Page 6, section 0085 and Page 7, section 0089 and see X.500 section 0013);

wherein the categories and category attributes are object oriented programming classes (section 0013 and section 0015);

wherein the category class is an ObjectScheme Java class and the category attribute class is an AttributeScheme Java class (JDBC section 0158 and 0159);

wherein the directory shell includes one or more directory references each associated with at least one of the one or more directories and wherein the one or more directory references each have a unique set of associated categories (LDAP directory is software server and LDAP address, which can be presented as a directory for use by other computers and allow LDAP directory to make reference to another directory when client request objects or attributes that are not stored in the primary directory: Page 10, section 0120 and Page3, section 0025 and Page 4, section 0026; LDAP can be used to enable queries and updates to be made to a directory structure, also is a type of Internet directory service and is based on a domain- and attribute-oriented data model:

Page 2, sections 0013-0017 and Page 3, section 0018-0019; and a graphical user interface for displaying directory view and Page 12, section 0138 and Page 15, section 0169).

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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**Contact Information**

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anh Ly whose telephone number is (571) 272-4039 or via E-Mail: ANH.LY@USPTO.GOV or fax to **(571) 273-4039**. The examiner can normally be reached on TUESDAY – THURSDAY from 8:30 AM – 3:30 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene, can be reached on (571) 272-4107 or Primary Examiner Jean Corrielus (571) 272-4032.


Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to: Central Fax Center (703) 872-9306

ANH LY   
JAN. 6<sup>th</sup>, 2005

  
JEAN M. CORRIELUS  
PRIMARY EXAMINER